

## **Legal Bases for Excluding from Certain Clean Air Act Regulations the Biogenic Carbon Dioxide Emitted During Use of Forest Biomass**

There is an unnecessary cloud of regulatory uncertainty over biogenic CO<sub>2</sub> emissions. While EPA pledged to resolve this regulatory uncertainty by July 2014, the Agency has failed to do so, despite over eight years of work on this issue. This constitutes a regulatory barrier to bioenergy, inhibiting economic growth and job creation. There is substantial scientific support for the conclusion that the use of forest biomass for energy production does not increase greenhouse gas (GHG) concentrations in the atmosphere over time. EPA has ample legal authority to remove regulatory barriers to the use of forest biomass, consistent with directives from Congress and the President, by excluding biogenic CO<sub>2</sub> emissions from PSD BACT requirements and from compliance determinations for limitations on GHG emissions from electric generating units and other stationary sources.

### **1) Regulating emissions of CO<sub>2</sub> from combustion or other use of forest biomass does not further the goal of mitigating climate change.**

- a) In contrast to the transfer of geologically sequestered carbon to the atmosphere when fossil fuels are burned, the act of burning forest biomass returns carbon to the atmosphere that has been and will again be removed from the atmosphere through photosynthesis (the “carbon cycle”).
  - i) The “air pollution” that EPA is addressing through GHG regulation is the accumulation of elevated levels of GHGs in the global atmosphere.
  - ii) CO<sub>2</sub> emissions from the combustion or other use of forest biomass do not increase atmospheric levels of CO<sub>2</sub> when forest stocks are stable or increasing, as they are in the United States.
  - iii) This is recognized by federal agencies, such as DOE and USDA, and the international community.
- b) Extensive scientific and technical studies support excluding biogenic CO<sub>2</sub> from Clean Air Act regulation. There are over 80 scientific studies and papers supporting one or more of the following conclusions:
  - i) Given the forest carbon cycle, CO<sub>2</sub> emissions from combusting biomass are offset by tree growth.
  - ii) Energy generation from biomass produces significant net GHG emissions reductions.
  - iii) Forest stocks must be evaluated over broad spatial and temporal scales.
  - iv) U.S. forest stocks are stable or increasing and are projected to be for the foreseeable future, as reflected in reports based on Forest Inventory and Analysis (FIA) data collected by the U.S. Forest Service.
  - v) Increased demand for biomass will not deplete forest carbon stocks.
  - vi) Use of biomass residuals and biowastes for energy avoids or reduces GHG emissions from their alternative fate and should be deemed categorically carbon-neutral regardless of the state of forest carbon stocks.
- c) The studies were conducted by expert scientists, including those in the U.S. government, and their conclusions are well-established.

**2) Under Supreme Court precedent, EPA should not regulate the CO<sub>2</sub> emissions from burning or other use of forest biomass.**

- a) The central holding of *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014) (“*UARG*”) is that EPA must, before applying a particular CAA regulatory program to greenhouse gases, determine whether “their inclusion would be inconsistent with the statutory scheme.” 573 U.S. at 319. EPA should only apply particular regulatory requirements to emissions “that may sensibly be encompassed within the particular regulatory program.” *Id.*; see also *id.* at 316 (“where the term ‘air pollutant’ appears in the [Clean Air] Act’s operative provisions, EPA has routinely given it a narrower, context-appropriate meaning”).
- b) This holding requires EPA to consider whether regulating biogenic CO<sub>2</sub> emissions under New Source Performance Standards or the PSD program makes sense and whether it is consistent with the statutory intent of the term “pollutant.”
- c) Since the act of burning forest biomass for energy and other uses of forest biomass do not contribute to the accumulation of elevated levels of GHGs in the global atmosphere, EPA can and should choose not to impose CAA restrictions on CO<sub>2</sub> emissions from those activities.

**3) EPA has clear discretion, under judicial precedent and consistent with past EPA practice, to choose not to regulate biogenic CO<sub>2</sub> emissions, because there would be little or no regulatory benefit of doing so.**

- a) EPA, like other administrative agencies, has inherent authority to choose not to impose regulatory requirements that would otherwise apply to an activity, if doing so would result in *de minimis* regulatory benefit. This principle has been recognized repeatedly by the Supreme Court, including in the context of BACT for GHGs in *UARG v. EPA*. See 134 S. Ct. at 2449 (“However, EPA may require an ‘anyway’ source to comply with greenhouse-gas BACT only if the source emits more than a *de minimis* amount of greenhouse gases.”). Perhaps the most-cited case on this principle, *Alabama Power Co. v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979), recognized EPA’s discretion “to exempt from PSD review some emission increases on grounds of *de minimis* or administrative necessity.” The Court explained that such an exemption was justified when “the burdens of regulation yield a gain of trivial or no value.” *Id.* at 360-61.
- b) EPA has repeatedly exercised its *de minimis* authority to exempt certain activities from regulation because of their negligible effect on the air pollution the regulation addresses. In addition to broad *de minimis* exemptions for, e.g., new or additional pollutant emissions below specified annual mass emissions rates and routine maintenance, repair, and replacement activities, the PSD regulations also exclude the emission of certain pollutants from regulation because of the effect, or lack thereof, of emissions of the particular pollutant on adverse air pollution.
  - vii) For example, the PSD regulations exclude certain VOCs, such as ethane, from permitting requirements because of their “negligible” contribution to air pollution (smog) when they react with other chemicals and sunlight in the atmosphere, even though the compounds otherwise fit within the definition of the pollutant VOC.

- viii) Similarly, EPA, with the blessing of the *Alabama Power* court, excludes a portion of some particulate matter emissions from PSD and other CAA regulations, based on the differing health effects associated with ambient exposure to different particle sizes.
- c) With respect to regulation of GHGs in particular, EPA has already exercised its *de minimis* authority. For example:
- i) EPA only regulates six of the greenhouse gases, even though they only account for 75% of total anthropogenic heating. And for the greenhouse gases EPA does regulate, it treats the same mass differently for different compounds, based on the predicted effect of elevated levels of that pollutant in the global atmosphere (applying a “global warming potential” factor to each of the pollutants except CO<sub>2</sub>).
  - ii) The light-duty vehicle rule and NSPS for power plants only regulate a subset of the six constituents of the pollutant “greenhouse gases” that EPA defined in the Endangerment Finding, based on the insignificant role of the emissions of the other constituents from those activities.
  - iii) In the Clean Power Plan, EPA concluded that using certain biomass fuel has little or no adverse effect on the accumulation of elevated levels of GHGs in the atmosphere, and can in some cases have a beneficial effect on those levels, and therefore EPA would allow state plans to treat the burning of such biomass fuel as producing zero regulated CO<sub>2</sub> emissions.
- d) *Massachusetts v. EPA* and other case law does not restrict EPA’s discretion on how to regulate CO<sub>2</sub> emissions. EPA thus can use its *de minimis* authority to exclude from PSD and CAA section 111(d) regulations, in consideration of the unique facts of the natural carbon cycle applicable to use of forest biomass, and recognizing there is little or no regulatory benefit to regulating the CO<sub>2</sub> emitted from combustion or other use of forest biomass.
- e) The D.C. Circuit Court opinion in *Center for Biological Diversity v. EPA*, 722 F.3d 401 (D.C. Cir. 2013) does not limit EPA’s discretion to do so.
- i) The decision was procedural in nature, and the Court found only that EPA did not provide sufficient justification for deferral of the issue pending further EPA review. EPA did not brief or argue its legal authority to exclude biogenic CO<sub>2</sub> from PSD regulations once that review was completed. See 722 F.3d. at 409 (explaining that EPA expressly did not rely on the statement in the Deferral Rule preamble “that it had authority to exempt biogenic carbon dioxide sources that have ‘a negligible or positive impact on the carbon cycle and net atmospheric CO<sub>2</sub> levels,’” because EPA concluded that would be an appropriate basis for a rule providing such an exemption, rather than a rule deferring a decision on the exemption).
  - ii) Accordingly, the majority opinion “leaves for another day” the question of whether EPA can permanently exempt biogenic CO<sub>2</sub> emissions from PSD permitting, although the concurring and dissenting opinions go further and suggest EPA can do so (by “tinker[ing] with the Endangerment Finding” or exercising EPA’s *de minimis* authority, see *id.* at 413 n.1 and 419-20).
- f) In its March 2011 BACT guidance, EPA recognized the use of biomass as BACT for reducing CO<sub>2</sub> emissions from bioenergy production. Thus, requiring a BACT review for a project’s biogenic CO<sub>2</sub> emissions imposes a burden with little or no regulatory benefit.

#### **4) Congress directed EPA to recognize forest biomass carbon-neutrality.**

- a) In the Consolidated Appropriations Act of 2017, and again in the 2018 and 2019 Consolidated Appropriations Acts, Congress recognized the carbon-neutrality of forest biomass.
- b) Congress specifically mandated that EPA, USDA and DOE “*shall...ensure that Federal Policy...recognizes the full benefits of the use of forest biomass for energy*” and “*establish clear and simple policies . . . that **reflect** the carbon-neutrality of forest bioenergy and recognize biomass as a renewable energy resource.*” Pub. L. No. 116-6 § 428(1)-(2) (emphases added).
  - i) “Reflect” means “to make manifest or apparent: show.” *See Merriam-Webster Dictionary*. Congress did not say “that determine” the carbon-neutrality of forest bioenergy.
  - ii) Congress’ direction is evident. Even if there were any ambiguity, the statements of the sponsors of the amendment to the 2016 Senate Energy Bill, the language of which Congress later adopted and repeatedly affirmed as federal law in the Appropriations Acts, make clear that EPA should interpret the provision as directing EPA to treat forest bioenergy as carbon-neutral when adopting regulatory policy.
- c) The sole exception Congress provided to carbon-neutrality is if “the use of forest biomass for energy production” were to “cause the conversion of forests to non-forest use.”
  - i) Under the *expressio unius est exclusio alterius* canon of statutory construction, EPA may not add other limitations on Congress’ directive to treat forest bioenergy as carbon-neutral.
  - ii) There is no meaningful evidence that the use of forest biomass for energy production in the U.S. is the “cause” of the conversion of forests to non-forest use.
  - iii) To the contrary, there is strong evidence, including from U.S. Forest Service studies and reports under the Forest and Rangelands Renewable Resources Planning Act (RPA), that increased demand for forest biomass helps avoid the conversion of forests to non-forest use and incentivizes investments to increase forest carbon stocks.
  - iv) Numerous studies in EPA’s docket have repeatedly shown that forest owners will respond to increased demand for forest biomass for energy (or any other forest product) by increasing production, thereby retaining land in forest cover and increasing forest carbon stocks, and USDA also has reached this conclusion.
- d) The Appropriations Act provision creates permanent substantive law. The language and purpose of the provision make clear that it is not intended to last only until the end of the fiscal year; substantially more time is required to effectuate its mandates and purposes.

#### **5) Removing regulatory barriers to bioenergy furthers the productive capacity of the U.S. and its energy policy.**

- a) Recognizing the carbon-neutrality of forest biomass furthers the goals and policies of the President’s Executive Order 13783, *Promoting Energy Independence and Economic Growth*.
- b) To find otherwise would place the domestic forest owners and forest products manufacturers at a disadvantage compared with how other countries regulate biomass.

- c) GHG CAA permitting programs impose needless delays, costs, and regulatory burdens and risks on biomass projects with little or no regulatory benefit, since the atmosphere sees no net increase of GHGs from such projects.